

WAIST TWISTING MACHINE

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 This invention relates to a waist twisting machine, particularly to one automatically forcing a user to twist the waist regularly and also receive massage at the same time so as to slimming the body.

2. Description of the Prior Art

10 On the market many fitting machines are available for waist twisting, buttock swaying, breast expanding, weight lifting, jogging, etc. Hula-hoops are quite simple for twisting the waist of a user, possible to be rotated around the waist with soft smooth movement, so they are
15 prevalent among consumers.

 Although the hula-hoops are not expensive and simple to use, they have some disadvantages.

 1. A user must have some experience or technique, or he/she cannot keep a hula-hoop rotate
20 continuously without falling down the waist.

 2. They are sized definite, not applicable for everyone.

 3. At the beginning of rotating the hula-hoop, a user may be prone to hurt the waist, especially for
25 the old.

 4. A user has to focus on a hula-hoop in using, impossible to do other work.

5. During rotating a hula-hoop on the waist, it can only make massage to the waist with a point touching so its massage effect is quite trivial.

SUMMARY OF THE INVENTION

5 A main objective of the invention is to offer a waist twisting machine having a hoop adjustable in its location in a disc, and when the hoop is adjusted to have the same center with the disc, numerous massage rollers fixed on an inner surface of the hoop may make
10 massage to the waist of a user positioning in the hoop, in addition to twisting the waist. Further, the user can adjust training mode and strength by controlling a panel.

A second objective of the invention is to offer a waist twisting machine, adjustable in the rotating speed
15 of a hoop, along with in changing rotating direction, clockwise or counterclockwise, so as to let everyone receive the best training condition in using the machine by directly controlling the panel with conjunction of a computer.

20 BRIEF DESCRIPTION OF DRAWINGS

This invention will be better understood by referring to the accompanying drawings, wherein:

Figure 1 is a perspective view of a waist-twisting machine in the present invention;

25 Figure 2 is a partial exploded perspective view of the waist-twisting machine in the present invention;

Figure 3 is a side and partial cross-sectional view

of the waist-twisting machine in the present invention;

Figure 4 is a side view of the waist-twisting machine with its rotating unit lifted up in the present invention;

5 Figure 5 is an upper view of a disc in rotation and a hoop body in sliding movement in the present invention; and,

Figure 6 is a side view of the waist-twisting machine in a using condition by a person in the present
10 invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of a waist twisting machine in the present invention, as shown in Figs. 1 and
15 2, includes a main base 10, a rotating unit 20, an auxiliary base 30 and a hull unit 40 as main components combined together.

The main base 10 has a post 11, a fixing base 12, a power source 13, a gear unit 14 and two press members
20 15.

The post 11 is upright, having a grip 111 fixed at the upper end and extending to the right and the left side of the post 11.

The fixing base 12 has a horizontal support arm
25 121 extending rearward to movably combined with the post 11, and a rack 12 lengthwise. The support arm 121 has its rear end fitting around the post 11 and provided

with a swing handle 122 engaging with the rack 112 to enable the support arm 121 move up and down along the post 11 by swinging the handle 122.

The power source 13 consists of a motor 131 and a speed-reducer 132 combined with the spindle of the motor 131, positioned in the fixing base 12

The gear unit 14 consists of a main gear 141 and two subordinate gears 142 respectively engaging with the main gear 141, and the main gear 14 is connected with an output shaft of the speed-reducer 132. The two press members 15 are respectively connected with the two subordinate gears 142 to rotate together synchronously counterclockwise.

The rotating unit 20 consists of a disc 21 and a hoop 22, and the disc 22 has an annular groove 211 for the two press members 15 of the main base 10 to fit in and to rotate the disc 21 and an opening 212 formed in the center. The hoop 22 is shaped as a ring, having a open space in the center for the waist of a user to fit therein, and numerous massage rollers 221 fixed on an inner surface and a connect rod 222 fixed with an outer surface of the hoop 22 and having its outer end inserting movably in the wall defining the opening 212, with the hoop 22 is positioned in the opening 212. Then the connected rod 222 is locked stably with a fastener 223 in the wall of the opening 212, enabling the hoop 22 to be adjusted in its location in the opening 212.

The auxiliary base 30 has a second post 31 standing upright and a support pin 32 pivotally connected with the second post 31 at a preset location to fit in the annular groove 211 of the disc 21.

5 The hull unit 40 consists of two upper hulls 41 and a lower hull 42, and the two upper hulls 41 respectively surround an upper half of the main base 10 and the auxiliary base 30. The top end of the upper hull 41 of the main base 10 has a panel 411 controlling operation of the
10 power source of the machine fixed thereon. As shown in Fig. 1, for the benefit of pressing for operating, the lower hull 42 surrounds the main base 10 and the lower half portion of the auxiliary base 30. Further, a standing platform 421 is formed between the bottom of the main
15 base 10 and of the auxiliary base 30 for the two feet of a user to stand thereon.

Next, as shown in Fig. 3, the hoop 22 has a size a little larger than the waist of a user and also large enough for the shoulder of the user to pass through, so a
20 user can move in the hoop 22 from under the disc 21. Or a pivotal rotating point (not shown) may be provided on the first post 11 of the main base 10 and some air or liquid pressure cylinders 50 provided pivotally between the upper hull 41 and the lower hull 42 to drive to lift
25 the upper hull 41 together with the first post 11, the fixing base 12 and the rotating unit 20 to swing up, as shown in Fig. 4 to enable a user to enter the hoop 22 and

then lowered down.

In using the waist twisting machine, referring to Figs. 5 and 6, a user may directly enter the hoop 22 from under the disc 21 or lift the upper hull 41 as just described above, and then enters the hoop 22 and lowers it down, with the waist of the user positioned in the hoop 22. Then the user checks if the height of the waist is proper. If not, the user handles the swing handle 122 to adjust the height of the disc 21. Then the user controls the panel 411 to start the motor 131 and reduced in its speed by the speed-reducer 132 to increase torque, which is then transmitted to the gear unit 14 and then to the two press members 15, which then press the annular groove 211 of disc 21 and rotates the disc 21 at the same time. The hoop 22 is adjusted to the non-coaxial location with the disc 21. Then when the hoop 22 is rotated with the disc 21, the center of the hoop 22 may move in a circle so that the hoop 22 compels the user to twist the waist for the degree in the proportion to the distance between the two centers of the hoop 22 and the disc 21. So a user can adjust the twisting degree (or force) so as to suit to his/her own body size. At the same time, the massage rollers 221 can give massage action to the waist of the user incessantly during movement of the hoop 22.

The invention has the following advantages, as can be seen from the foresaid description.

1. A user can have the waist receiving regular

twisting action after entered the hoop, because of the circular motion of the disc, in addition to the arms holding the grips receiving like weight lifting effect at the same time.

5 2. The waist of the user can receive massage action by the massage rollers on the inner surface of the hoop during the circular motion of the disc, acquiring the effect of twisting and slimming at the same time.

10 3. To suit to one's own need, a user can choose the best speed of the motion of the disc driven by the motor with the speed-reducer possible to be adjusted by controlling the panel because of the rotating speed and its clockwise and counterclockwise rotation being
15 controlled by the panel.

 4. The hoop can be adjusted in its location in the disc, so when the hoop is adjusted to have the same co-axial center with the disc, the hoop only rotates at the same spot to have the waist receiving the massage
20 action. But when the center of the hoop is moved outward farther away from that of the disc, the hoop will have its radius of the circular motion growing larger and larger, in other words, the degree (or force) of the twisting action to the waist of the user becomes
25 larger and larger. So a user can select to adjust the degree of receiving twisting action according to his/her own need, whether the user is old or young.

While the preferred embodiment of the invention has been described above, it will be recognized and understood that various modifications may be made therein and the appended claims are intended to cover all
5 such modifications that may fall within the spirit and scope of the invention.